

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-013752**Date Inspected:** 13-Mar-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Xu Le Feng**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower Components**Summary of Items Observed:**

On this date Caltrans Office of Structural Materials Quality Assurance Inspector, Sandeep Kumar (QA) was present during the times noted above for observations relative to the work being performed.

**BAY 10**

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted Notification No. 005327

**Ultrasonic Testing (UT)**

This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The member is identified as Tower Component. The weld designations reviewed are as follows:

**SOUTH TOWER LIFT 4 CD CORNER DIAGONAL PLATE BUTT WELDS**

1. SSTL4 – 1D/L – 1~14

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted Notification No. 005335

**Ultrasonic Testing (UT)**

This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The member is identified as Tower Component. The weld designations reviewed are as follows:

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# WELDING INSPECTION REPORT

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## TOWER SPARE STRUT

1. ED1 – A6001 – 4 – 7A/B – Green Tag # 11727

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted Notification No. 005333

### Visual Inspection Testing (VT)

This QA inspector performed VT of the area previously tested and accepted by ZPMC Quality Control personnel. The member is identified as Tower Component. The identified component reviewed as follows:

#### NORTH TOWER LIFT 4 BC CORNER SEAM

1. NSTL4 – 3B/L – 5A

### Magnetic Particle Testig (MT)

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The member is identified as Tower Component. The weld designations reviewed are as follows:

#### NORTH TOWER LIFT 4 BC CORNER SEAM

1. NSTL4 – 3B/L – 5A – Green Tag # 11610

This QA Inspector observed the following work in progress:

#### Flux Core Arc Welding (FCAW):

Weld joint # 03 located on North Tower Lift-4 C/D Corner Diaogonal Plate NSTL4 – 3K/L. Welder is identified as 066165. ZPMC Quality Control (QC) Inspector is identified as Wang Hao. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2133.

#### Sub-Merged Arc Welding (SAW):

Weld joint # 24B located on South Tower Lift 5 D/E Corner SSD1 – TL5 – 1B/F. Welder is identified as 201750. ZPMC Quality Control (QC) Inspector is identified as Yu Zhai Li. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3221 – C – U2b – S.

Weld joint # 52B located on South Tower Lift 5 D/E Corner SSD1 – TL5 – 1B/F. Welder is identified as 051413. ZPMC Quality Control (QC) Inspector is identified as Yu Zhai Li. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3221 – C – U2b – S.

(See attached photo)

## BAY 11

This QA Inspector observed the following work in progress:

#### Shielded Metal Arc Welding (SMAW):

Weld joint # 1-1A located on Strut Connection plate WD1 – SA4– 56 – 127M. Welder is identified as 046704. ZPMC Quality Control (QC) Inspector is identified as Liu Dao Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3211 – Tc – U5b – 1.

(See attached photo)

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## WELDING INSPECTION REPORT

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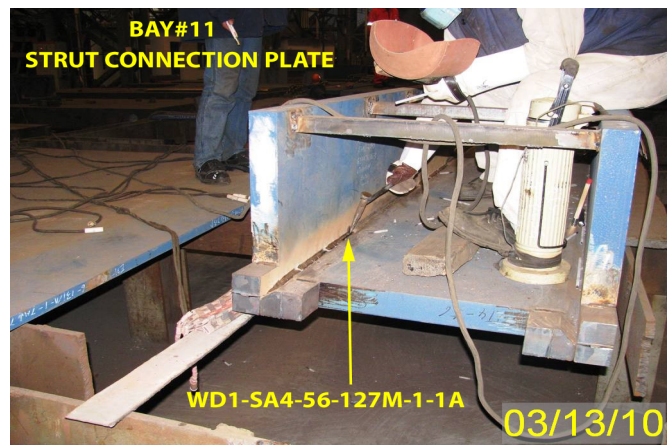
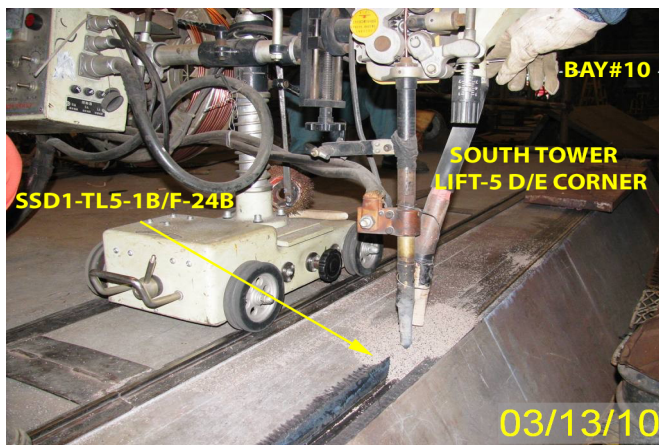
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Weld joint # 4-1A located on Strut Connection plate WD1 – SA4– 56 – 127M. Welder is identified as 040656. ZPMC Quality Control (QC) Inspector is identified as Liu Dao Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3211 – Tc – U5b – 1.

Sub-Merged Arc Welding (SAW):

Weld joint # 6-1B located on Strut Connection Plate ED1 – SA4 – 68 – 143. Welder is identified as 042915. ZPMC Quality Control (QC) Inspector is identified as Yu Dong Ping. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3221 – Tc – U5 – S – 1.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



### Summary of Conversations:

No Relevant Conversations.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Skyler Guest - 15000422360, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Kumar,Sandeep	Quality Assurance Inspector
<b>Reviewed By:</b>	Clifford,William	QA Reviewer

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